REMARKS

This responds to the Office Action mailed on September 21, 2005.

No claims have been amended, canceled, or added; as a result, claims 1-30 are pending in this application.

Information Disclosure Statement

The Information Disclosure Statements (IDS) filed on August 1, 2005 had references placed in the application file, but the information has not been considered by the Examiner because the IDS failed to comply with 37 CFR 1.98(a)(1). Applicants respectfully submit that each of the requirements have been met and therefore, the references need to be considered by the Examiner.

Further, the Applicants respectfully submit that WO-09951359A1, listed in the IDS of August 1, 2005, be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, with WO-09951359A1 initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

§102 Rejection of the Claims

Claims 1, 2, 4-8, 12-16 and 18-22 and 25-30 were rejected under 35 U.S.C. § 102(e) for anticipation by Akatsu et al. (U.S. 6,523,064). This rejection is respectfully traversed.

Anticipation requires the disclosure in a single prior art reference of each element of the claims under consideration. *In re Dillon,* 919 F.2d 688, 16 USPQ2d 1897, 1908 (Fed. Cir. 1990) (en banc), cert. denied, 500 U.S. 904 (1991).

Akatsu at col. 8, line 61 to col. 9, line 21 recites:

> "The OS kernel 804 provides for task switching, message queue and delivery, interrupt handling, timer management and memory management. Also, the OS kernel 804 provides the electronic device interoperability functions which are used to control home gateway 504.
>
> "The hardware 824 represents the physical layer, or lowest layer, of the firmware stack 800.

> "In a presently preferred embodiment, the home gateway 504 functions as a bridge/router between the external network 904 and the internal network 912 (described in detail with reference to FIGS. 9-12 below). The home gateway 504 therefore provides a middle-layer between the external network 904 and the internal network 912 that is used for protocol and data formatting transformation, as well as address mapping functionality (described below). In particular, the home gateway 504 is a preferred "managing node" for maintaining the address mapping table (described below with reference to FIG. 16), wherein the home gateway 504 stores node address information in a memory, periodically updates the node address information, polls IEEE 1394 nodes (as used herein, "IEEE 1394 nodes" refers to one or more nodes residing on the IEEE 1394 bus 568 and comporting with the node 104 described with reference to FIGS. 1-4 above) on the internal network 912 and gathers node attributes from the polled IEEE 1394 nodes for the address mapping table 1600. Further details of the address mapping 1600 and the address mapping service are described below with reference to FIG. 13."

Akatsu further recites:

> "FIG. 11 illustrates a protocol stack 1100 for TCP/IP data transmission from the IP network 920 to the PC 946. In order to facilitate automatic setup and IP address assignments, the protocol stack 1100 supports a domain name system ("DNS"), as described in Internet RFCs 1034 and 1035, and dynamic host configuration protocol ("DHCP").
> "FIG. 12 illustrates a protocol stack 1200 for bitmap transfer between devices (e.g., from the home gateway 504 or PC 946 to the TV adapter 932) over the internal network 912. The protocol stack 1200 employs additional and previously non-described protocol "DD-Connect AsyBmp" 1204. The "bitmap transfer" protocol is described in further detail below. The "AP" protocol 1208 is simply the particular protocol used at the application layer (e.g., a display protocol or a mouse protocol).
> "Address Mapping
> "FIG. 13 depicts an exemplary address mapping table 1600. The address mapping table 1600 preferably comprises at least four columns and as many rows as there are devices on the home entertainment network 500. The address mapping table 1600 is preferably partitioned into three distinct sections. The first section 1620 comprises IEEE 1394 service data, the second section 1624 comprises MPEG service data, and a third section 1628 comprises IP service data. Each section has its own "mini-table" for information, although the address mapping table 1600 is physically a single table.
> "In the IEEE 1394 section 1620, the first column is the node unique ID column 1604, the node unique ID is permanently encoded into the hardware or ROM of the node 104. The next group of columns are node attribute columns 1602. The node attribute columns include a common name column 1608, which identifies a particular node by a user selected/programmed name that is stored in the node, a node_ID column 1612, which contains a dynamically assigned 16_bit node_ID, a node type column 1616, and an IP address column 1618.
> "In the MPEG service section 1624, the first column is the ATM VPI/VCI column 1632,

> the next column is the program information column 1636, the third column is the IEEE 1394 isochronous channel column 1640 and the last column is the node unique ID column 1604.
>
> "In the IP service section 1628, the first column is the ATM VPI/VCI column 1632, the next column is the IP address column 1618, the third column is the node_ID column 1612, and the last column is the node unique ID column 1604.
>
> "The address mapping table 1600 is created by the IEEE 1394 driver (e.g., IEEE 1394 driver 816 shown in FIG. 8) when a bus reset occurs. The IEEE 1394 driver receives a response from each node in the IEEE 1394 bus (e.g., IEEE 1394 bus 568 shown in FIG. 5) identifying the node's node unique ID and other information. Based on the information received from the node, the IEEE 1394 driver adds the node unique ID to the address mapping table 1600 and then queries the particular node for additional information (e.g., common name, node capabilities and IP address). The IEEE 1394 driver assigns a valve to node_ID column 1612 for the node.
>
> "Command and Control Transfer
>
> "FIGS. 14-17, depict aspects of command and control transfer according to a presently preferred embodiment of the present invention. Moreover, FIGS. 14 and 15 are flowcharts illustrating the steps for command and control transfer and packet data handling, respectively, whereas FIGS. 16A-C depict an embodiment of the display information that is created on a video display unit as a result of the steps depicted in FIGS. 14 and 15. FIG. 17 illustrates a node icon table.
>
> "To begin the command and control transfer process, a trigger is received. For example, a trigger can include a "menu" button on a remote control that initiates the command and control transfer process, or a stored procedure in a device residing in the home entertainment network 500. As shown in FIG. 14, a packet engine output from process 1804 (described below with reference to FIG. 15) can initiate the acts for command and control transfer.
>
> "Act 1704 includes reading the address mapping table 1600. Once the address mapping table 1600 is read, a node icon table is read in act 1708.
>
> "The node icon table has no less than two columns and identifies an image for each device on the home entertainment network 500. The first column represents a node (for example, either a node unique ID or a node type), and the second column represents the node's icon. It is, however, possible to have additional columns in the table, such as a node type, and a node unique ID. Accordingly, if a particular node's icon is desired, the first the node icon table is scanned for the node's unique ID, *if the node unique ID is not found, then the node icon table is scanned for the desired node type (e.g., the node can be compliant with a particular device standard).* When a matching node unique ID or, alternatively, a matching node type is found, then the icon for the desired node is retrieved at act 1716." Akatsu, col. 10, line 32 to col. 11, line 62 (emphasis added).

Akatsu, at col. 11, line 63 to col. 12, line 58, further recites:

> "An embodiment of a node icon table is depicted in FIG. 17. The node icon table 2000 includes node unique ID column 1604, a node type column 1608, and a bitmap data column

2004. The bitmap data column holds approximately 4 kB of data for the node icon. In one embodiment, data for a single icon is contained in the node icon table 2000, however, in an alternative embodiment, data for two icons is contained in the node icon table 2000: one icon is an "inactive" icon, meaning the icon displayed when the node is not selected, and the second is an active node icon, meaning the icon displayed when the node is selected.

"In act 1720, a complete node navigation tree is generated. The node navigation tree is depicted in FIGS. 16A-B. In FIG. 16A, the node navigation tree 1900 comprises a control node represented by icon 1904. The control node is the node through which a user is communicating. Destination nodes are represented by icons 1908, 1912 and 1916. As depicted in FIG. 16A, control node's icon 1904 is in active mode, whereas the destination nodes' icons 1908, 1912 and 1916 are in inactive mode. When additional nodes are added to the home entertainment system 500, the number of destination node icons will increase. Similarly, when existing nodes are removed from the home entertainment system 500, the number of destination node icons will be reduced accordingly.

"The node navigation tree 1900 is transmitted to the video display unit at act 1724. According to one embodiment, the node navigation tree 1900 is output to a packet engine 1800, where it is processed as an input to process 1808 (described below with reference to FIG. 15).

"In act 1728 a navigation input is received. Again, the navigation input can be received from an input device within the internal network 912 (FIG. 9), or it can be received from the external network 904, such as through the packet engine process 1804. Based on the input received in act 1728, a particular destination node will be identified. The control node retrieves the icon information (e.g., the active mode graphic) from the node navigation table 1600, and, in act 1732, modifies a subset of the navigation tree 1900. In an alternative embodiment, standard active mode data, such as a highlighted border or ring, is added to the portion of the navigation tree 1900 representing the selected destination node, thus, retrieval of active mode icon data from the address mapping table 1600 is not required. Based upon the active mode data, a portion, or subset of the node navigation tree 1900 is modified. The portion of the node navigation tree 1900 modified can include modified data corresponding to the "newly" selected active node, or it can additionally include modified data corresponding to the node which has been switched from active mode to inactive mode. According to a presently preferred embodiment, both data concerning the new active node icon and the old active node icon are modified.

"FIG. 16B depicts the node navigation tree 1900 after the destination node corresponding to icon 1916 has been selected as the active node. The portion of the node navigation tree 1900 that has been modified is the subset of data corresponding to icons 1904 and 1916. In act 1736 the modified subset of the node navigation tree 1900 is transmitted to the video display unit. In an alternative embodiment, the modified subset of the node navigation tree 1900 is passed to the packet engine 1800 and routed to the external network 904 by process 1808."

In contrast, independent claim 1 recites:

> "determining whether the at least one automated process generated satisfactory geolocation information for the network address; and

> if the automated process did not generate satisfactory geolocation information for the network address, then forwarding of the network address for manual resolution."

In contrast, independent claim 15 recites:

> "a second system to perform at least one automated process to generate geolocation information for the network address, to determine whether the geolocation information generated by the at least one automated process for the network address is satisfactory, and, if the geolocation information for the network address is not satisfactory, to forward the network address for manual resolution."

In contrast, independent claim 29 recites:

> "determining whether the geolocation information generated for the network address by the at least one automated process is satisfactory; and
> if the automated process did not generate satisfactory geolocation information for the network address, then forwarding of the network address for manual resolution."

In contrast, independent claim 30 recites:

> "second means for performing at least one automated process to generate geographic location information for the network address, for determining whether the geographic location information generated by the at least one automated process is satisfactory, and, if the automated process did not generate satisfactory geolocation information for the network address, for forwarding the network address for manual resolution."

The Action indicates that col. 8, line 61 to col. 9, line 21 of Akatsu, col. 10, line 32 to col. 11, line 62 of Akatsu, and col. 11, line 28 to col. 12, line 58 of Akatsu (reproduced above), discloses and/or is equivalent to the above-recited claimed elements. Applicants respectfully disagree.

Applicants respectfully submit that independent claims 1, 15, 29 and 30 are not anticipated because Akatsu simply fails to teach each and every claimed element, including (a) "determining whether the at least one automated process generated *satisfactory* geolocation information for the network address" as recited in claim 1, for example, and (b) "if the automated process did not generate satisfactory geolocation information for the network address, *then forwarding of the network address for manual resolution*" as recited in claim 1, for example.

(a) Akatsu fails to disclose: "determining whether the at least one automated process generated *satisfactory* geolocation information for the network address" as recited in claim 1, for example.

In particular, col. 11, line 57 to col. 11, line 62 of Akatsu is specifically relied upon by the Action on page 9 for "determining whether the at least one automated process generated *satisfactory* geolocation information for the network address" as recited in claim 1 (emphasis added). However, there is no support in the Action that, for example, when "a matching node unique ID or, alternatively, a matching node type is found, then the icon for the desired node is retrieved at act 1716" as recited in col. 11, line 57 to col. 11, line 62 of Akatsu is equivalent to "determining whether the at least one automated process generated *satisfactory* geolocation information for the network address" as recited in claim 1 (emphasis added).

(b) Akatsu fails to disclose: "if the automated process did not generate satisfactory geolocation information for the network address, *then forwarding of the network address for manual resolution*" as recited in claim 1, for example.

Col. 11, line 28 to col. 12, line 58 of Akatsu is specifically relied upon by the Action on page 9 for "if the automated process did not generate satisfactory geolocation information for the network address, *then forwarding of the network address for manual resolution*" as recited in claim 1 (emphasis added). It is respectfully submitted, following the reasoning outlined on page 9 of the Action, that there is no support in the Action that, for example, "*if the node unique ID is not found, then the node icon table is scanned for the desired node type (e.g., the node can be compliant with a particular device standard)*" as recited in col. 11, line 57 to col. 11, line 62 of Akatsu is equivalent to "if the automated process did not generate satisfactory geolocation information for the network address, *then forwarding of the network address for manual resolution*" as recited in claim 1 (emphasis added).

Further, because Akatsu clearly does not disclose "determining whether the at least one automated process generated *satisfactory* geolocation information for the network address," Akatsu simply cannot be relied upon to disclose "*if the automated process did not generate satisfactory* geolocation information for the network address, *then forwarding of the network address for manual resolution*" as recited in claim 1, for instance.

Even if manual retrieval of geographic location information is discussed (see col. 16, lines 58-65 of Akatsu, for example), Applicants are unable to find a link between manual resolution of Akatsu and whether "the automated process did not generate satisfactory geolocation information for the network address," as recited in claim 1.

Because all the elements of independent claim 1 are not found in Akatsu, Applicants assume that the Examiner is asserting that these elements are inherent in Akatsu. As recited in MPEP § 2112, "In relying upon the theory of inherency, the Examiner must provide basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art," citing Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). Applicants respectfully submit that the Office Action has not established a *prima facie* case of inherency.

Applicants respectfully submit that "determining whether the at least one automated process generated *satisfactory* geolocation information for the network address" does not necessarily flow from Akatsu. The Action merely stated that col. 10, line 32 to col. 11, line 62 of Akatsu is equivalent to "determining whether the at least one automated process generated *satisfactory* geolocation information for the network address." Thus, the Office Action does not even assert that the allegedly inherent characteristic (element (a) of claim 1) is necessary in Akatsu, let alone provide a basis in fact and/or technical reasoning.

Likewise, the Action merely asserts that col. 11, line 28 to col. 12, line 58 (reproduced above) of Akatsu discloses "if the automated process did not generate satisfactory geolocation information for the network address, then forwarding of the network address for manual resolution" as recited in claim 1 (emphasis added). Thus, the Office Action does not even assert that the allegedly inherent characteristic (element (b) of claim 1) is necessary in Akatsu, let alone provide a basis in fact and/or technical reasoning.

To serve as an anticipation when a reference is silent about the asserted inherent characteristic, the gap in the reference may be filled with recourse to extrinsic evidence of record. But, such evidence must make clear that "the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." *Continental Can Co. v. Monsanto Co.,* 20 USPQ2d 1746, 1749 (Fed. Cir. 1991).

Because there is no evidence in the record to support such inherency assertions, the unsupported assertions appear to be personal knowledge of the Examiner. The Examiner is thus respectfully requested to submit an affidavit as required by 37 C.F.R. § 1.104(d)(2).

Without the requisite extrinsic evidence, the Office Action has not made out a *prima* *facie* case of anticipation. Accordingly, independent claim 1 is patentable over Akatsu, and Applicants respectfully request that the rejection be withdrawn.

Independent claims 15, 29 and 30 are also asserted to be allowable for reasons similar to those presented above. Applicants consider elements of claims 15, 29 and 30 to further distinguish over the cited references, and Applicants reserve the right to present arguments to this effect at a later date.

Reconsideration of the independent claims 1, 15, 29, and 30 is respectfully requested. Further, withdrawal of the rejection of these independent claims 1, 15, 29, and 30, as well as for all rejected claims which depend from the allowable independent claims, is respectfully requested.

Claims 2, 4-8, 12-14, 16, 18-22 and 25-28 depend from independent claims 1 or 15 and incorporate all of the limitations therein, respectively. Claims 2, 4-8, 12-14, 16, 18-22 and 25-28 are also asserted to be allowable for the reasons presented above, and Applicants respectfully request notification of same. Applicants consider additional elements of claims 2, 4-8, 12-14, 16, 18-22 and 25-28 to further distinguish over the cited references, and Applicants reserve the right to present arguments to this effect at a later date.

§103 Rejection of the Claims

Claims 3, 11 and 17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Akatsu in view of Zoken (U.S. 5,944,787). This rejection is respectfully traversed.

Claims 3, 11 and 17 depend from independent claims 1 or 15 and incorporate all of the limitations therein, respectively. Claims 3, 11 and 17 are also asserted to be allowable for the reasons presented above, and Applicants respectfully request notification of same. Applicants consider additional elements of claims 3, 11 and 17 to further distinguish over the cited references, and Applicants reserve the right to present arguments to this effect at a later date.

Allowable Subject Matter

Claims 9, 10, 23, and 24 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 9, 10, 23, and 24 depend from claim 1 or claim 15. Because claims 1 and 15 are in condition for allowance, as discussed above; claims 9, 10, 23, and 24 are also allowable as originally submitted since they are dependant upon claims which are believed to be allowable. Applicants respectfully submit that claims 9, 10, 23, and 24 are in condition for allowance.

CONCLUSION

Applicants respectfully submit that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicants' attorney Lucinda Price at 352-373-8804 (Gainesville, Florida) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

MARK ANDERSON ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402
352-373-8804

Date 11/21/05 By
Andre L. Marais
Reg. No. 48,095

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop AF, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 21 day of November, 2005.

Dawn R. Shaw
Name

Dawn R. Shaw
Signature